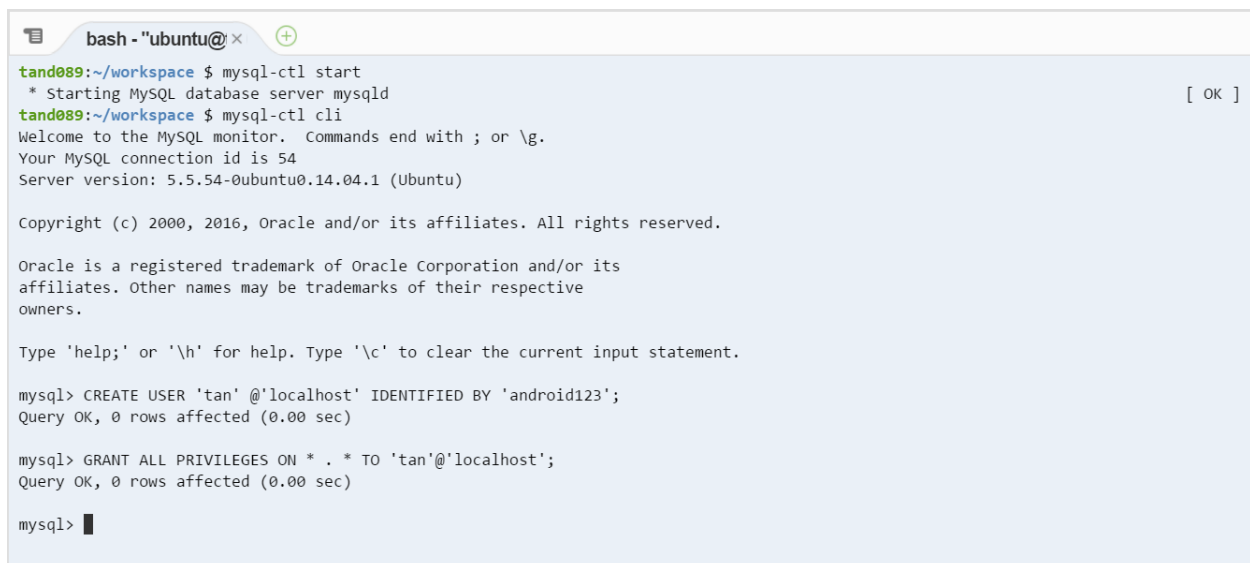


## CSE575-Section3: feedback activity

- I. Backend server requirements:
  1. MySQL: to store user information and messages.
  2. PHP: to parse data into MySQL database.
- II. Create database and table in My SQL (We will use c9.io backend server that we have created before, check the section 2 for references.)
  1. Create username and password for MySQL
    - Open the terminal on c9.io
    - Start MySQL: `mysql-ctl start`
    - Go to MySQL: `mysql-ctl cli`
    - Create new user with password: `CREATE USER 'tan' @'localhost' IDENTIFIED BY 'android123';`  
Note: user is tan and password is android123
    - Grant the privilege to the new user: `GRANT ALL PRIVILEGES ON *.* TO 'username'@'localhost';`



```
bash - "ubuntu@x"
tand089:~/workspace $ mysql-ctl start
* Starting MySQL database server mysqld
tand089:~/workspace $ mysql-ctl cli
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 54
Server version: 5.5.54-0ubuntu0.14.04.1 (Ubuntu)

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE USER 'tan' @'localhost' IDENTIFIED BY 'android123';
Query OK, 0 rows affected (0.00 sec)

mysql> GRANT ALL PRIVILEGES ON * . * TO 'tan'@'localhost';
Query OK, 0 rows affected (0.00 sec)

mysql>
```

- Type exit and log in the username and password we just created.
- Log in: `mysql -u tan -p` > press enter > enter the password which is "android123"
- Create new database called SchoolDatabase: `CREATE DATABASE SchoolDatabase;`

```

tand089:~/workspace $ mysql -u tan -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 57
Server version: 5.5.54-0ubuntu0.14.04.1 (Ubuntu)

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE DATABASE SchoolDatabase;
Query OK, 1 row affected (0.01 sec)

```

- Using the SchoolDatabase: use SchoolDatabase;
- Create table as show in the image below

```

mysql> use SchoolDatabase;
Database changed
mysql> CREATE TABLE SchoolTB (
  -> FIRSTNAME VARCHAR(100) NOT NULL,
  -> LASTNAME VARCHAR(100) NOT NULL,
  -> STUDENTID VARCHAR(50) NOT NULL,
  -> STUDENTEMAIL VARCHAR(100) NOT NULL,
  -> MESSAGES longtext NOT NULL
  -> );
Query OK, 0 rows affected (0.01 sec)

mysql> DESC SchoolTB;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| FIRSTNAME      | varchar(100)  | NO   |     | NULL    |       |
| LASTNAME       | varchar(100)  | NO   |     | NULL    |       |
| STUDENTID      | varchar(50)   | NO   |     | NULL    |       |
| STUDENTEMAIL   | varchar(100)  | NO   |     | NULL    |       |
| MESSAGES       | longtext      | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```

### III. Create SchoolFeedback.php to insert data into SchoolTB table

1. Create new file > SchoolFeedback.php
2. SchoolFeedback.php

```
<?php
```

```
$servername = "localhost";
```

```
$username = "tan";
```

```

$password = "android123";
$dbname = "SchoolDatabase";
try {
//Creating connection for mysql

$conn = new PDO("mysql:host=$servername; dbname=$dbname", $username,
$password);
// set the PDO error mode to exception
$conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
//use POST method to insert data into table
$stmt = $conn->prepare("INSERT INTO SchoolTB VALUES (:firstname, :lastname,
:studentID, :email, :messages)");

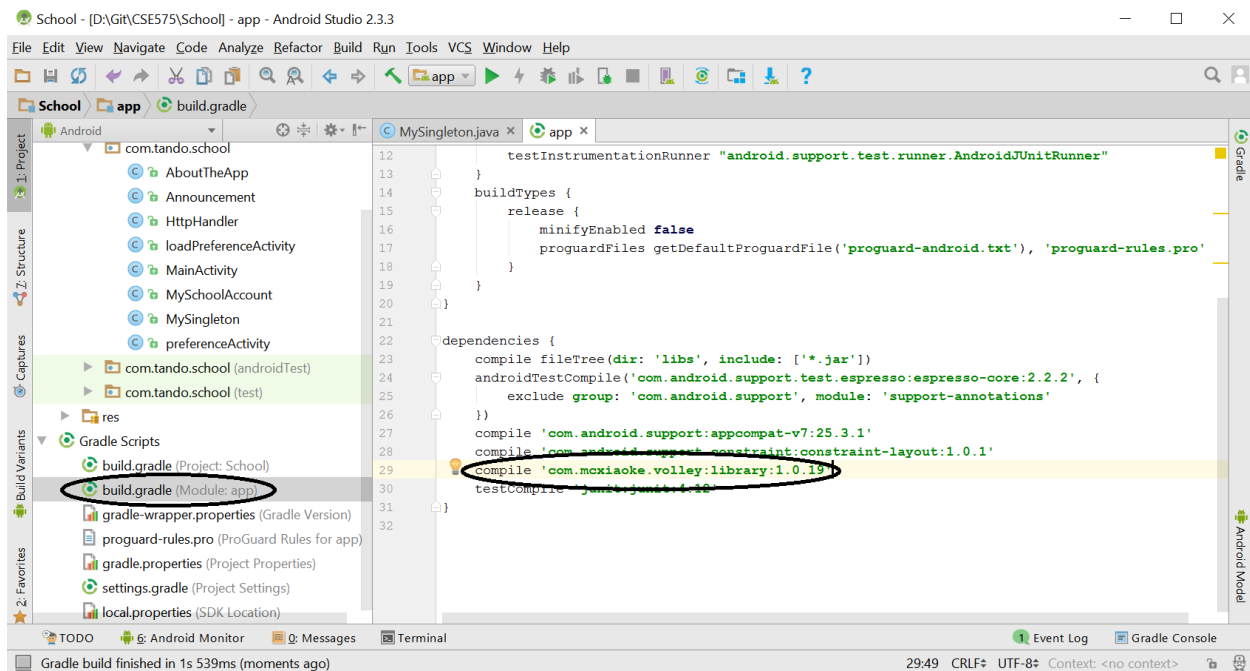
    $stmt->bindParam(':firstname', $_POST['FIRSTNAME']);
    $stmt->bindParam(':lastname', $_POST['LASTNAME']);
    $stmt->bindParam(':studentID', $_POST['STUDENTID']);
    $stmt->bindParam(':email', $_POST['STUDENTEMAIL']);
    $stmt->bindParam(':messages', $_POST['MESSAGES']);

$stmt->execute();
echo "Submitted Successfully";
}
catch(PDOException $e) {
    echo "Error: " . $e->getMessage();
}
$conn = null;
?>

```

- IV. Now we finish with the backend server, next we will do frontend for the app. We will use “volley” library to implement this activity.
1. Add the following dependency to your app's build.gradle: as show in the images

**\*\*Gradle Scripts > build.gradle > paste "compile 'com.mcxiaoke.volley:library:1.0.19'" > click sync now.**



## 2. Create a MySingleton.java to be a class for Feedback activity

MySingleton.java: details in comments

```
private static MySingleton mInstance;
private RequestQueue requestQueue;
private static Context mContext;

private MySingleton (Context context)
{
    // Specify the application context
    mContext = context;
    // Get the request queue
    requestQueue = getRequestQueue();
}

//synchronized method
public static synchronized MySingleton getInstance(Context context) {
    // If Instance is null then initialize new Instance
    if (mInstance == null) {
        mInstance = new MySingleton(context);
    }
    // Return MySingleton new Instance
    return mInstance;
}

//method for request queue
public RequestQueue getRequestQueue() {
    //check to see the requestQueue is initialized or not
    if (requestQueue == null) {
        requestQueue = Volley.newRequestQueue(mContext.getApplicationContext());
    }
    //return request queue
    return requestQueue;
}
```

```

public <T>void addTorequestqueue(Request<T> request){
    // Add the specified request to the request queue
    requestQueue.add(request);
}

```

3. Create new activity called Feedback, and 2 sub-activities named SchoolFeedback and DepFeedback
  - Style the UI for Feedback

activity\_feedback.xml

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="com.tando.school.Feedback"
    android:orientation="vertical"
    android:background="#FFF"
    android:paddingBottom="0dp"
    android:paddingLeft="0dp"
    android:paddingRight="0dp"
    android:paddingTop="0dp">
    <ScrollView
        android:layout_width="match_parent"
        android:layout_height="match_parent">
        <LinearLayout
            android:orientation="vertical"
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:layout_marginBottom="10dp">

            <!--Logo -->
            <ImageView
                android:id="@+id/logo"
                android:layout_width="150dp"
                android:layout_height="100dp"
                android:background="@drawable/school_logo"
                android:layout_gravity="center"/>

            <Button
                android:text="Feedback to school"
                android:textSize="17dp"
                android:textColor="#FFFFFF"
                android:layout_width="match_parent"
                android:id="@+id/feedback01"
                android:layout_marginTop="50dp"
                android:layout_height="wrap_content"
                android:background="@drawable/sections"
                android:onClick="feedbackSchool"/>

            <Button
                android:text="Feedback to CSE department"
                android:textSize="17dp"
                android:textColor="#FFFFFF"
                android:layout_width="match_parent"
                android:id="@+id/feedback02"
                android:layout_marginTop="30dp"
                android:layout_height="wrap_content"
                android:background="@drawable/sections"
                android:onClick="feedbackDep"/>

            <!--Social Media -->

```

```

<LinearLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="30dp"
    android:orientation="horizontal"
    android:layout_gravity="center">

    <ImageView
        android:id="@+id/faceBook"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:src="@drawable/ic_facebook"
        android:paddingRight="5dp"
        android:onClick="fbClick"/>

    <ImageView
        android:id="@+id/googlePlus"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:src="@drawable/ic_google"
        android:paddingRight="5dp"
        android:onClick="googleClick"/>

    <ImageView
        android:id="@+id/linkedin"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:src="@drawable/ic_linkedin"
        android:paddingRight="5dp"
        android:onClick="linkedinClick"/>

    <ImageView
        android:id="@+id/youtube"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:src="@drawable/ic_youtube"
        android:paddingRight="5dp"
        android:onClick="youtubeClick"/>

    <ImageView
        android:id="@+id/twitterT"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_weight="1"
        android:src="@drawable/ic_twitter"
        android:paddingRight="5dp"
        android:onClick="twitterClick"/>

    </LinearLayout>
</LinearLayout>
</ScrollView>

</LinearLayout>

```

\*Note: go to manifest.xml to change theme, label, and parentActivityName for this activity.

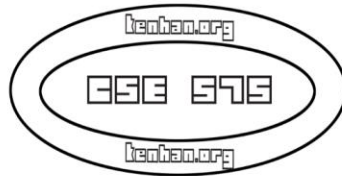
```
<activity
    android:name=".Feedback"
    android:label="Feedback"
    android:parentActivityName=".MainActivity"
    android:theme="@style/customTheme"></activity>
```



LTE 8:23



## Feedback



FEEDBACK TO SCHOOL

FEEDBACK TO CSE DEPARTMENT





## Feedback.java

```
package com.tando.school;

import android.content.Intent;
import android.net.Uri;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;

public class Feedback extends AppCompatActivity {

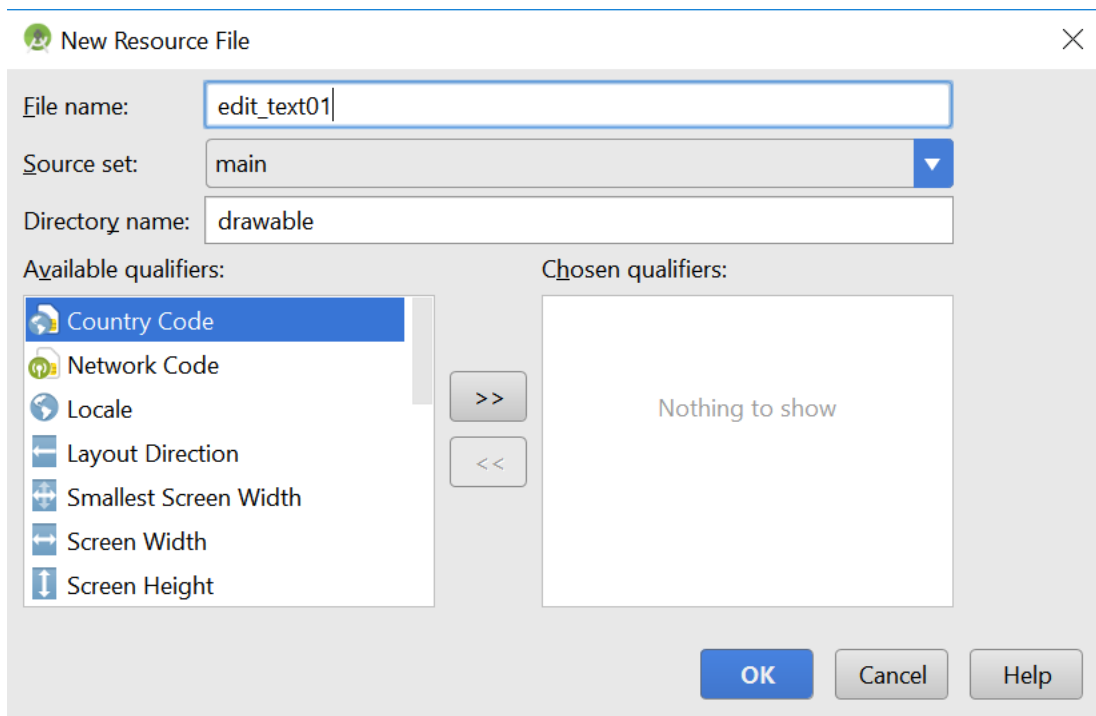
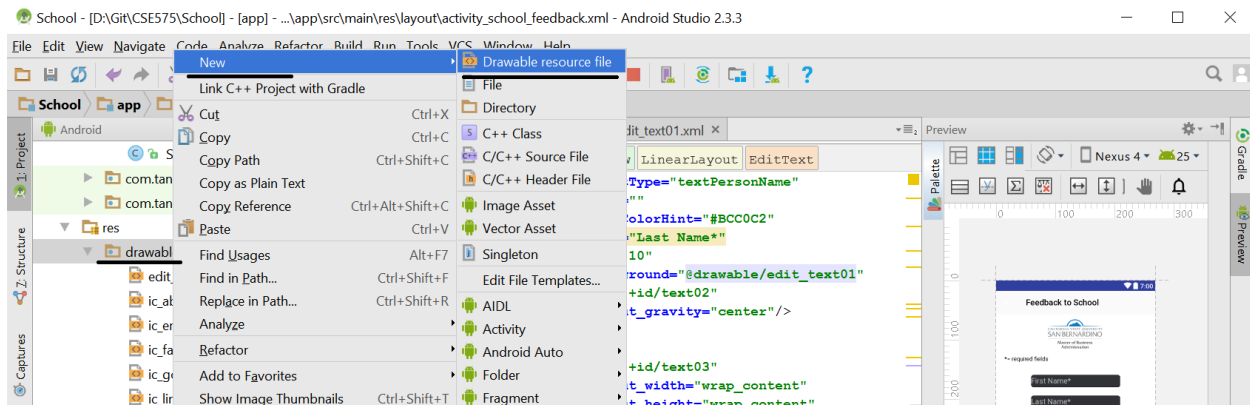
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_feedback);
    }

    //SchoolFeedback activity
    public void feedbackSchool (View view) {
        startActivity(new Intent(this, SchoolFeedback.class));
    }
    //DepFeedback activity (feedback to a department)
    public void feedbackDep (View view) {
        startActivity(new Intent(this, DepFeedback.class));
    }
    //link to FaceBook
    public void fbClick (View view) {
        //use startActivity and Intent methods to parse the link
        startActivity(new Intent(Intent.ACTION_VIEW,
Uri.parse("https://www.facebook.com/flitetest/")));
    }
    //google+
    public void googleClick (View view) {
        //use startActivity and Intent methods to parse the link
        startActivity(new Intent(Intent.ACTION_VIEW,
Uri.parse("https://plus.google.com/u/0/+google/")));
    }
    //LinkedIn
    public void linkedInClick (View view) {
        //use startActivity and Intent methods to parse the link
        startActivity(new Intent(Intent.ACTION_VIEW,
Uri.parse("https://www.linkedin.com/in/mbacsusb/")));
    }
    //youtube
    public void youTubeClick (View view) {
        //use startActivity and Intent methods to parse the link
        startActivity(new Intent(Intent.ACTION_VIEW,
Uri.parse("https://www.youtube.com/channel/UCwqJShoifP6032UXYe-sD-A")));
    }
    //Twitter
    public void twitterClick (View view) {
        //use startActivity and Intent methods to parse the link
        startActivity(new Intent(Intent.ACTION_VIEW,
Uri.parse("https://twitter.com/Google")));
    }
}
```

```
}
}
```

#### 4. Style UI for SchoolFeedback

- Style the EditText fields: as shown in the images below



edit\_text01.xml

```

<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android"
    android:padding="2dp"
    android:shape="rectangle"
    >
    <solid android:color="#313235"/>
    <corners android:radius="12px"/>
    <stroke android:width="1dp" android:color="#000"/>
    <size android:height="30dp"/></size>
</shape>

```

- Make a bigger EditText field for messages: do the same steps as edit\_text01, and call it edit\_text02

edit\_text02.xml

```
<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android"
    android:padding="2dp"
    android:shape="rectangle"
    >
    <solid android:color="#313235"/>
    <corners android:radius="12px"/>
    <size android:height="200dp"/>
</shape>
```

- Next SchoolFeedback UI

activity\_school\_feedback.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context="com.tando.school.SchoolFeedback"
    android:orientation="vertical"
    android:background="#FFF">
    <ScrollView
        android:layout_width="match_parent"
        android:layout_height="match_parent">
        <LinearLayout
            android:orientation="vertical"
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:layout_marginBottom="10dp">

            <!--Logo -->
            <ImageView
                android:id="@+id/logo"
                android:layout_width="150dp"
                android:layout_height="100dp"
                android:background="@drawable/school_logo"
                android:layout_gravity="center"/>

            <TextView
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:layout_gravity="left"
                android:layout_marginLeft="20dp"
                android:textColor="#000"
                android:text="*= required fields"/>

            <EditText
                android:layout_marginTop="10dp"
                android:layout_marginBottom="15dp"
                android:textColor="#000000"
                android:layout_width="wrap_content"
                android:layout_height="wrap_content"
                android:inputType="textPersonName"
                android:text=""
                android:textColorHint="#BCC0C2"
                android:hint="First Name*"
                android:ems="10"
                android:background="@drawable/edit_text01"
                android:id="@+id/text01">
```

```

        android:layout_gravity="center"/>

<EditText
    android:layout_marginBottom="15dp"
    android:textColor="#000000"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:inputType="textPersonName"
    android:text=""
    android:textColorHint="#BCC0C2"
    android:hint="Last Name*"
    android:ems="10"
    android:background="@drawable/edit_text01"
    android:id="@+id/text02"
    android:layout_gravity="center"/>

<EditText
    android:id="@+id/text03"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="center"
    android:layout_marginBottom="15dp"
    android:background="@drawable/edit_text01"
    android:ems="10"
    android:hint="Student ID*"
    android:inputType="number"
    android:text=""
    android:textColor="#000000"
    android:textColorHint="#BCC0C2" />
<EditText
    android:layout_marginBottom="15dp"
    android:textColor="#000000"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:inputType="textPersonName"
    android:text=""
    android:textColorHint="#BCC0C2"
    android:hint="Student Email*"
    android:ems="10"
    android:background="@drawable/edit_text01"
    android:id="@+id/text04"
    android:layout_gravity="center"/>
<EditText
    android:gravity="top"
    android:layout_marginBottom="10dp"
    android:textColor="#000000"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text=""
    android:textColorHint="#BCC0C2"
    android:hint="Messages...*"
    android:ems="10"
    android:background="@drawable/edit_text02"
    android:id="@+id/text05"
    android:layout_gravity="center"/>
<Button
    android:text="Submit"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/bnt01"
    android:layout_gravity="center"
    android:layout_marginTop="10dp"
    android:layout_marginBottom="10dp"

```

```
        android:background="#313235"
        android:textColor="#FFF"/>
    </LinearLayout>
</ScrollView>
</LinearLayout>
```



4G



11:52



## Feedback to School



\*= required fields

## SchoolFeedback.java: details in comments

```
package com.tando.school;

import android.content.Context;
import android.content.DialogInterface;
import android.support.v7.app.AlertDialog;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.view.inputmethod.InputMethodManager;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

import com.android.volley.AuthFailureError;
import com.android.volley.Request;
import com.android.volley.Response;
import com.android.volley.VolleyError;
import com.android.volley.toolbox.StringRequest;

import java.util.HashMap;
import java.util.Map;

public class SchoolFeedback extends AppCompatActivity {
    //Declare variables
    Button bntfunc;
    EditText FirstName, LastName, StudentID, StudentEmail, Messages;
    //link to server
    String server_url ="https://schoolserver-tand089.c9users.io/SchoolFeedback.php";

    AlertDialog.Builder builder;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_school_feedback);
        //cast the variables
        bntfunc = (Button) findViewById(R.id.bnt01);
        FirstName = (EditText) findViewById(R.id.text01);
        LastName = (EditText) findViewById(R.id.text02);
        StudentID = (EditText) findViewById(R.id.text03);
        StudentEmail = (EditText) findViewById(R.id.text04);
        Messages = (EditText) findViewById(R.id.text05);
        builder = new AlertDialog.Builder(SchoolFeedback.this);

        //set fucntion for the submit button
        bntfunc.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                //Hide virtual keyboard after click the submit button
                InputMethodManager inputManager = (InputMethodManager)
                    getSystemService(Context.INPUT_METHOD_SERVICE);

                inputManager.hideSoftInputFromWindow(getCurrentFocus().getWindowToken(),
                    InputMethodManager.HIDE_NOT_ALWAYS);
                //declares some strings
                final String firstName, lastName, studentID, studentEmail, messages;
                //covert inputs from edittexts to strings
                firstName = FirstName.getText().toString();
                lastName = LastName.getText().toString();
                studentID = StudentID.getText().toString();
            }
        });
    }
}
```

```

        studentEmail = StudentEmail.getText().toString();
        messages = Messages.getText().toString();
        //Ensure no empty fields
        if (firstName.equals("") || lastName.equals("") ||
studentID.equals(""))
            || studentEmail.equals("") || messages.equals("")) {
            builder.setTitle("Error!!!");
            //Creating a AlertDialog to display errors
            AlertDialog alertDialog01 = builder.create();
            alertDialog01.setMessage("Please Enter All Required Fields*");
            alertDialog01.show();
        }
        else {
            //request with POST method and string
            StringRequest stringRequest = new
StringRequest(Request.Method.POST, server_url,
                new Response.Listener<String>() {
                    @Override
                    public void onResponse(String response) {
                        //get response form server to check if it is
successfully submitted

                        builder.setTitle("Server Response");
                        builder.setMessage("Congratulation" + " " +
response);

                        builder.setPositiveButton("OK", new
DialogInterface.OnClickListener() {
                            @Override
                            public void onClick(DialogInterface dialog,
int which) {

                                //clear the text fields after submit
                                FirstName.setText("");
                                LastName.setText("");
                                StudentID.setText("");
                                StudentEmail.setText("");
                                Messages.setText("");

                            }
                        });
                        AlertDialog alertDialog = builder.create();
                        alertDialog.show();
                    }
                },
                new Response.ErrorListener() {
                    @Override
                    public void onErrorResponse(VolleyError error) {
                        Toast.makeText(SchoolFeedback.this, "Error!!!",
Toast.LENGTH_SHORT).show();
                        error.printStackTrace();
                    }
                }) {
            @Override
            protected Map<String, String> getParams() throws
AuthFailureError {
                Map<String, String> params = new HashMap<String,
String>();

                //send data to mySQL server
                //the keys must be same as field names in mySQL server
                params.put("FIRSTNAME", firstName);
                params.put("LASTNAME", lastName);
                params.put("STUDENTID", studentID);
                params.put("STUDENTEMAIL", studentEmail);
                params.put("MESSAGES", messages);
                return params;
            }
        }
    }

```



```

    };

    MySingleton.getInstance(SchoolFeedback.this).addTorequestqueue(stringRequest);
    }
    });
}
}
}

```

Feedback to School

Kimmy

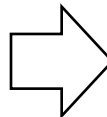
Lee

001234557

k.lee22@school.edu

Hello, I am a freshman, I would like to have more information about my class.

SUBMIT



Feedback to School

Kimmy

Lee

001234557

k.lee22@school.edu

Hello, I am a freshman, I would like to have more information about my class.

SUBMIT

**Server Response**  
Congratulation Submitted Successfully  
OK

- Check for the database on server to see if we have successfully stored the information into MySQL table

```

mysql> select * from SchoolTB;
+-----+-----+-----+-----+-----+
| FIRSTNAME | LASTNAME | STUDENTID | STUDENTEMAIL | MESSAGES |
+-----+-----+-----+-----+-----+
| Kimmy | Lee | 001234557 | k.lee22@school.edu | Hello, I am a freshman, I would like to have more information about my class. |
+-----+-----+-----+-----+-----+
1 row in set (0.01 sec)

```

- That is all for the Feedback activity. We can use this implementation to implement for feedback to other departments in school.